

General

Title

Hospitalization for potentially preventable complications: rate of discharges for ambulatory care sensitive conditions (ACSC) per 1,000 members and the risk-adjusted ratio of observed to expected discharges for ACSC by chronic and acute conditions, for members 67 years of age and older.

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

Measure Domain

Primary Measure Domain

Related Health Care Delivery Measures: Use of Services

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the rate of discharges for ambulatory care sensitive conditions (ACSC) per 1,000 members and the risk-adjusted ratio of observed to expected discharges for ACSC by chronic and acute conditions, for members 67 years of age and older.

This measure summary represents the Total ACSC category, the sum of the Chronic ACSC and Acute ACSC categories. Refer to the "Basis for Disaggregation" field for details.

Rationale

Ambulatory care sensitive conditions are acute and chronic health conditions that can be managed or treated in the outpatient setting. Appropriate access to care, high-quality care coordination, a focus on chronic disease self-management and connection to community resources can reduce the probability that individuals with these chronic and acute conditions will develop complications or exacerbations that result in hospitalization.

Hospital and inpatient care is the largest component of total health care costs for older adults (24 percent of Medicare spending, approximately \$129 billion dollars in 2013) (Kaiser Family Foundation, 2015). Hospitalization also poses several risks for older adults, who frequently develop serious conditions as a result of hospitalization such as delirium, infection and decline in functional ability (Gillick, Serrell, & Gillick, 1982; Covinsky, Pierluissi, & Johnston, 2011).

Reducing the rate of hospitalization for potentially preventable complications of acute and chronic conditions for older adults will improve patient health, reduce costs and improve quality of life. It is important to note that some complications or exacerbations are unavoidable and therefore the appropriate rate of hospitalization is not "zero;" however, this measure will provide important information to health plans, providers and consumers and other stakeholders about how well a system of care helps older adults with chronic and acute conditions prevent hospitalization.

Evidence for Rationale

Covinsky KE, Pierluissi E, Johnston CB. Hospitalization-associated disability: "She was probably able to ambulate, but I'm not sure". JAMA. 2011 Oct 26;306(16):1782-93. [PubMed](#)

Gillick MR, Serrell NA, Gillick LS. Adverse consequences of hospitalization in the elderly. Soc Sci Med. 1982;16(10):1033-8. [PubMed](#)

Kaiser Family Foundation (KFF). Medicare spending and financing fact sheet. [internet]. Oakland (CA): Kaiser Family Foundation (KFF); 2015 May 5.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

Primary Health Components

Ambulatory care sensitive conditions (chronic and acute); diabetes short-term complications; diabetes long-term complications; uncontrolled diabetes; lower extremity amputation among patients with diabetes; chronic obstructive pulmonary disease (COPD); asthma; hypertension; heart failure; bacterial pneumonia; urinary tract infection; cellulitis; pressure ulcer; utilization

Denominator Description

Members age 67 years and older as of December 31 of the measurement year (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

All acute inpatient stays with a discharge date during the measurement year for a chronic or acute ambulatory care sensitive condition (ACSC) (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA's) Committee on Performance Measurement and Board of Directors. Where applicable, measures also are assessed for construct validity using the Pearson correlation test. All measures undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis.

Evidence for Extent of Measure Testing

Rehm B. (Assistant Vice President, Performance Measurement, National Committee for Quality Assurance, Washington, DC). Personal communication. 2015 Mar 16. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Hospital Inpatient

Managed Care Plans

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

Age 67 years and older

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Priority

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Not within an IOM Care Need

IOM Domain

Not within an IOM Domain

Data Collection for the Measure

Case Finding Period

The measurement year

Denominator Sampling Frame

Enrollees or beneficiaries

Denominator (Index) Event or Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Members age 67 years and older as of December 31 of the measurement year

Note:

Members must have been continuously enrolled for the measurement year and the year prior to the measurement year.
Allowable Gap: No more than one gap in enrollment of up to 45 days during each year of continuous enrollment.

Exclusions

Members who are enrolled in an Institutional Special Needs Plan (iSNP) any time during the measurement year

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#) to purchase HEDIS Volume 2, which includes the Value Set Directory.

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

All acute inpatient stays with a discharge date during the measurement year for a chronic or acute ambulatory care sensitive condition (ACSC). Sum the events from the chronic ACSC and acute ACSC categories to obtain a total ACSC.

To identify the number of chronic ACSC acute inpatient discharges:

Identify all acute inpatient discharges during the measurement year. To identify acute inpatient discharges:

- Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set)

- Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set)

- Identify the discharge date for the stay

For the remaining acute inpatient discharges, identify discharges with any of the following:

- Primary diagnosis for diabetes short-term complications (ketoacidosis, hyperosmolarity or coma) (Diabetes Short Term Complications Value Set)

- Primary diagnosis for diabetes with long-term complications (renal, eye, neurological, circulatory or unspecified complications) (Diabetes Long Term Complications Value Set)

- Primary diagnosis for uncontrolled diabetes (Uncontrolled Diabetes Value Set)

- A procedure code for lower extremity amputation (Lower Extremity Amputation Procedures Value Set) *and* any diagnosis for diabetes (Diabetes Diagnosis Value Set)

- Primary diagnosis of chronic obstructive pulmonary disease (COPD) (COPD Diagnosis Value Set)

- Primary diagnosis for asthma (Asthma Diagnosis Value Set)

- Primary diagnosis for acute bronchitis (Acute Bronchitis Diagnosis Value Set) *and* diagnosis for

COPD (COPD Diagnosis Value Set)

Primary diagnosis for heart failure (Heart Failure Diagnosis Value Set)

Primary diagnosis of hypertension (Hypertension Value Set)

To identify the number of acute ACSC acute inpatient discharges:

Identify all acute inpatient discharges during the measurement year. To identify acute inpatient discharges:

Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set)

Exclude nonacute inpatient stays (Nonacute Inpatient Stay Value Set)

Identify the discharge date for the stay

For the remaining acute inpatient discharges, identify discharges with any of the following:

Primary diagnosis of bacterial pneumonia (Bacterial Pneumonia Value Set)

Primary diagnosis of urinary tract infection (Urinary Tract Infection Value Set)

Primary diagnosis of cellulitis (Cellulitis Value Set)

Primary diagnosis of pressure ulcer (Pressure Ulcer Value Set)

Note:

ACSC. An acute or chronic health condition that can be managed or treated in an outpatient setting. The ambulatory care conditions included in this measure are:

Chronic ACSC:

Diabetes short-term complications

Diabetes long-term complications

Uncontrolled diabetes

Lower-extremity amputation among patients with diabetes

COPD

Asthma

Hypertension

Heart failure

Acute ACSC:

Bacterial pneumonia

Urinary tract infection

Cellulitis

Pressure ulcer

Acute-to-acute Transfers: Keep the original discharge and drop the transfer's discharge.

For criteria that include multiple events, codes must be on the same claim.

Refer to the original measure documentation for risk adjustment determination, risk adjustment weighting and calculation of expected events

Report:

Number of Members in the Eligible Population. The number of members in the eligible population for each age and gender group and the overall total.

Number of Observed Events. The number of observed discharges within each age and gender group and the overall total for each ACSC category and Total ACSC.

Observed Discharges per 1,000 Members. The number of observed discharges divided by the number of members in the eligible population, multiplied by 1,000 within each age and gender group and the overall total for each ACSC category and Total ACSC.

Number of Expected Events. The number of expected discharges within each age and gender group and the overall total for each ACSC category and Total ACSC.

Exclusions

Lower-extremity Amputation Among Patients with Diabetes. Any discharge with a diagnosis for traumatic amputation of the lower extremity (Traumatic Amputation of Lower Extremity Value Set) or toe amputation procedure (Toe Amputation Value Set)

COPD, Asthma, and Acute Bronchitis. Any discharge with a diagnosis for cystic fibrosis and anomalies of the respiratory system (Cystic Fibrosis and Respiratory System Anomalies Value Set)

Heart Failure. Any discharges with a cardiac procedure (Cardiac Procedures Value Set)

Hypertension. Any discharge with a cardiac procedure (Cardiac Procedure Value Set) or diagnosis of a Stage I-IV kidney disease (Stage I-IV Kidney Disease Value Set) with a dialysis procedure (Dialysis Value Set)

Bacterial Pneumonia. Any discharge with a diagnosis of sickle cell anemia, HB-S disease (Sickle Cell Anemia and HB-S Disease Value Set) or procedure or diagnosis for immunocompromised state (Immunocompromised State Value Set)

Urinary Tract Infection. Any discharge with a diagnosis of kidney/urinary tract disorder (Kidney and Urinary Tract Disorder Value Set) or procedure or diagnosis for immunocompromised state (Immunocompromised State Value Set)

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#) to purchase HEDIS Volume 2, which includes the Value Set Directory.

Numerator Search Strategy

Institutionalization

Data Source

Administrative clinical data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Risk Adjustment Weighting Process Diagram

Computation of the Measure

Measure Specifies Disaggregation

Measure is disaggregated into categories based on different definitions of the denominator and/or numerator

Basis for Disaggregation

This Total ambulatory care sensitive conditions (ACSC) measure is disaggregated based on ACSC categories:

Chronic

Acute

Scoring

Ratio

Interpretation of Score

Does not apply to this measure (i.e., there is no pre-defined preference for the measure score)

Allowance for Patient or Population Factors

not defined yet

Description of Allowance for Patient or Population Factors

Risk Adjustment Determination and Weighting. For each member in the eligible population, identify risk adjustment categories based on presence of a comorbidity, age, and gender. Calculation of risk-adjusted outcomes (counts of discharges) uses predetermined risk weights generated by two separate regression models. Weights from each model are combined to predict how many discharges each member may have during the measurement year, given their age, gender and the presence or absence of a comorbid condition. Refer to the original measure documentation for additional details.

Measure results are stratified by age, gender, and the overall total.

Standard of Comparison

not defined yet

Identifying Information

Original Title

Hospitalization for potentially preventable complications (HPC).

Measure Collection Name

HEDIS 2016: Health Plan Collection

Measure Set Name

Utilization and Risk Adjusted Utilization

Measure Subset Name

Risk Adjusted Utilization

Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed

of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Oct

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

Measure Availability

Source available for purchase from the [National Committee for Quality Measurement \(NCQA\) Web site](#)

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For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org .

Companion Documents

The following is available:

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical update. Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct 1. 12 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org .

NQMC Status

This NQMC summary was completed by ECRI Institute on April 14, 2016.

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Production

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

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